

detecting a last intensity maximum reflected from the layer at a first wavelength prior to the selected etch endpoint; and

detecting an intensity maximum reflected at a second wavelength first occurring after the last intensity maximum at the first wavelength.

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8. (Three Times Amended) A method for determining an endpoint for etching a layer having an initial thickness, comprising steps of, during etch,

directing radiant energy at three or more wavelengths onto the layer to be etched;

selecting first, second, and third wavelengths;

selecting an etch rate from a time interval between a first detected intensity minimum and an adjacent intensity maximum reflected at the third wavelength, and selecting a main etch endpoint based on the initial thickness of the layer and the selected etch rate;

detecting a last intensity maximum reflected at the first wavelength prior to the selected etch endpoint; and

detecting an intensity maximum reflected from the layer at the second wavelength first occurring after the last intensity maximum at the first wavelength.

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